IN THE CLAIMS:

Claims 23-24 were previously cancelled. Claims 2, 3, 5, 9, 10, 12, 16, and 20-22 have been canceled herein. Claims 1 and 4 and withdrawn claims 5, 13, 18, and 19 have been amended herein. New claims 25 through 29 are to be added. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of the Claims:

1. (Currently amended) A method for obtaining information about the capacity or tendency of an oligopeptide of at most 9 amino acids long to regulate expression of a gene, the oligopeptide consisting of an amino acid sequence corresponding to a fragment of human chorionic gonadotropin hormone (hCG), the method comprising the steps of:

a) contacting said oligopeptide with at least one cell; and

b) determining the ~~presence~~ activity of a member of the NF-kappaB/Rel protein family in or derived from said at least one cell, relative to a cell that has not been contacted with the oligopeptide.

2. and 3. (Canceled).

4. (Currently amended) The method according to claim 1 wherein said cell ~~comprises an~~ is a eukaryotic cell.

5. (Canceled).

6. (Withdrawn – currently amended) ~~A method for identifying or obtaining a signalling molecule comprising a peptide or functional derivative or analogue thereof capable of modulating expression of a gene in a cell comprising providing said cell with a peptide or derivative or analogue thereof and determining the activity and/or nuclear translocation of a gene transcription factor and~~ The method according to claim 1, further comprising:

~~then synthesising the~~ synthesizing a molecule with the desired activity so as to obtain a signaling molecule.

7. (Withdrawn) The method according to claim 6 further comprising determining whether said signalling molecule is membrane-permeable.

8. (Withdrawn) The method according to claim 6 wherein said gene transcription factor comprises a NF-kappaB/Rel protein.

9. and 10. (Canceled).

11. (Withdrawn) The method according to claim 6 further comprising determining relative up-regulation and/or down-regulation of a multitude of genes expressed in said cell.

12. (Canceled).

13 (Withdrawn – currently amended) The method according to claim [[12]] 6 further comprising providing a multitude of peptides or derivatives or analogues thereof and determining binding of at least one of said peptides or derivatives or analogues thereof to a factor related to gene control.

14. (Withdrawn – currently amended) The method according to claim [[12]] 13 wherein said factor related to gene control ~~comprises~~ is a transcription factor.

15. (Withdrawn) The method according to claim 14 wherein said transcription factor ~~comprises~~ is a NF-kappaB-Rel protein.

16. (Canceled).

17. (Withdrawn – currently amended) The method according to claim 12 further comprising ~~providing a cell with said peptide or derivative or analogue thereof and~~ determining relative up-regulation ~~and/~~or down-regulation of at least one gene expressed in said cell.

18. (Withdrawn – currently amended) ~~A signalling~~ The method according to claim 1, further comprising:

identifying a signaling molecule useful in modulating expression of a gene in a cell ~~and identifiable or obtainable by employing a method according to claim 1~~.

19. (Withdrawn – currently amended) ~~A signalling molecule~~ The method according to claim 18, wherein the signaling molecule is selected from the group consisting of ~~peptides~~ LQG, AQG, LQGV (SEQ ID NO:1), AQGV (SEQ ID NO:2), LQGA (SEQ ID NO:19), VLPALP (SEQ ID NO:13), ALPALP (SEQ ID NO:21), VAPALP (SEQ ID NO:22), ALPALPQ (SEQ ID NO:23), VLPAAPQ (SEQ ID NO:24), VLPALAQ (SEQ ID NO:25), LAGV (SEQ ID NO:26), VLAALP (SEQ ID NO:27), VLPALA (SEQ ID NO:28), VLPALPQ (SEQ ID NO:29), VLAALPQ (SEQ ID NO:30), VLPALPA (SEQ ID NO:31), GVLPALP (SEQ ID NO:32), ~~LQGVLPALPQVVC (SEQ ID NO:34), LPGCPRGVNPVVS (SEQ ID NO:40),~~ LPGC (SEQ ID NO:41), MTRV (SEQ ID NO:42), MTR, and VVC~~, and functional analogues or derivatives thereof~~.

20. – 24. (Cancelled).

25. (New) The method according to claim 1, wherein determining the activity of a NF-kappaB/Rel protein family member comprises determining the capacity of the oligopeptide to enhance transcription of a target gene.

26. (New) The method according to claim 1, wherein determining the activity of a NF-kappaB/Rel protein family member comprises determining the capacity of the oligopeptide to repress transcription of a target gene.

27. (New) The method according to claim 1, wherein determining the activity of a NF-kappaB/Rel protein family member comprises determining the capacity of the oligopeptide to alter the subcellular localization of said NF-kappaB/Rel protein family member.

28. (Withdrawn, new) The method according to claim 13, wherein determining the capacity of the oligopeptide to alter the subcellular localization of said NF-kappaB/Rel protein family member is performed by measuring transcription factor translocation.

29. (New) A method for identifying an oligopeptide able to regulate gene expression, wherein the oligopeptide is at most 9 amino acids long and consists of a fragment of human chorionic gonadotropin hormone, the method comprising the steps of:

(a) contacting a cell with the oligopeptide;

(b) determining the amount of NF-kappaB/Rel protein in the cell;

(c) determining the amount of NF-kappaB/Rel protein in a cell that has not been contacted with the oligopeptide, and

(d) determining the ratio of the amount of NF-kappaB/Rel protein found in step (b) to the amount of NF-kappaB/Rel protein found in step (c) so as to identify an oligopeptide able to regulate the expression of a gene.